

PATENT

4. (Unchanged) The security thread of claim 3 wherein each of the piezoelectric layers has poled and unpoled regions.

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5. (Unchanged) The security thread of any one of the preceding claims wherein the thread further comprises a metallisation layer between the piezoelectric polymer layer and the magnetic layer.

6. (Amended) A security thread comprising a magnetic layer sandwiched between protective layers, wherein at least one of the protective layers comprises a piezoelectric polymer and wherein the security thread further comprises a metallisation layer between the piezoelectric polymer layer and the magnetic layer, and further wherein the metallisation layer acts as a ground electrode for the piezoelectric layer.

Please add the following new claims:

7. (New) The security thread of claim 1, wherein the piezoelectric polymer is capable of receiving a plurality of charges which may be used in authentication of a document in which the security thread is embedded.

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8. (New) A security thread comprising:

a magnetic layer sandwiched between first and second metallisation layers;
a first polymeric layer disposed on the first metallisation layer; and,
a second polymeric layer disposed on the second metallisation layer,
wherein the first polymeric layer is comprised of a piezoelectric material and the second polymeric layer is comprised of a non-piezoelectric flexible plastic material.

9. (New) The security thread of claim 8, wherein the first polymeric layer includes a plurality of horizontal dipoles and plurality of vertical dipoles.